AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A system, comprising:

an assigning portion for assigning external port values to network nodes respectively corresponding to the external port values based on information collected from the network nodes of ~~the~~ a private network, and storing the assigned external port values;

an exchanging portion for exchanging the external port values of the respective network nodes of private networks; and

an address converting portion for converting the external port values into corresponding private IP addresses and internal port values when a network node of one private network accesses another network node of another private network by using the external port values of another network node of another private network.

2. (original): The system as claimed in claim 1, wherein each of the network nodes is assigned at least one external port value.

3. (original): The system as claimed in claim 2, wherein the external port value has an http communication protocol.

4. (original): The system as claimed in claim 2, wherein the external port value has an FTP communication protocol.

5. (original): The system as claimed in claim 2, wherein the external port value has a TELNET communication protocol.

6. (previously presented): A method, comprising the steps of:

a) assigning separate external port values to a plurality of network nodes of private networks based on information collected from the network nodes, and storing the assigned external port values;

b) exchanging the assigned external port value of a certain network node of a certain private network with the assigned external port value of another network node of another private network, and storing the exchanged external port value; and

c) converting the exchanged external port value into a corresponding private IP address and internal port value, enabling the certain network node of the certain private network to access another network node of another private network by using the external port value of another network node of another private network.

7. (original): The method as claimed in claim 6, wherein the step c) converts the private IP address and internal port value into a corresponding external port value for forwarding a packet from a certain private network to another external private network, while converting the external port value of another external private network into corresponding private IP address and

internal port value for forwarding a packet from another external private network to the certain

private network.

8. (original): The method as claimed in claim 6, wherein each of the network nodes is

assigned at least one external port value.

9. (original): The method as claimed in claim 8, wherein the external port value has an

http communication protocol.

10. (original): The method as claimed in claim 8, wherein the external port value has an

FTP communication protocol.

11. (original): The method as claimed in claim 8, wherein the external port value has a

TELNET communication protocol.

12. (previously presented): A method, comprising the steps of:

i) assigning external port values to network nodes based on an information collected from

the network nodes and storing the information in a mapping table;

ii) generating a web page displaying node information of a private network, and linking

the web page to a global IP address;

iii) accessing the web page and the node information of the private network; and

iv) accessing one of the network nodes of the private network based on the node

information obtained in step iii).

13. (original): The method as claimed in claim 12, wherein the node information of step iii) comprises an external port value.

14. (original): The method as claimed in claim 12, wherein the web page of step ii) displays a screen containing icons for respective nodes of the private network.

15. (original): The method as claimed in claim 14, wherein each node is accessed by selecting and clicking the icon representing the node.

16. (original): The method as claimed in claim 12, wherein a private network provided with at least one global IP address performs step i).

17. (original): The method as claimed in claim 12, wherein a certain network node of a certain external private network performs step iii).

18. (original): The method as claimed in claim 17, wherein the certain network node of the certain external private network performs step iv).

19. (previously presented): A system for accessing a node of a private network, having a first network and a second network connected on the Internet, wherein

the first network comprises:

a first external port value assigning portion for assigning first external port values to first network nodes based on information collected from the first network nodes;

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a first exchanging portion for exchanging an external port value of a certain node of the first network with an external port value of one of the nodes of the second network, and storing the exchanged external port value; and

a first address converting portion for converting the external port value of the certain node of the first network into a corresponding external port value, enabling the certain node of the first network to access the one of the network nodes of the second network, and

the second network comprises:

a second external port value assigning portion for assigning second external port values to second network nodes based on information collected from the second network nodes;

a second exchanging portion for exchanging an external port value of a certain node of the second network with an external port value of one of the nodes of the first network, and storing the exchanged external port value; and

a second address converting portion for converting the external port values of the certain node of the second network into a corresponding private IP address, enabling the one of the nodes of the first network to access the certain node of the second network by using the external port value of the one of the nodes of the second network..